

HIGH FREQUENCY SOLAR INVERTER  
PV1800 ECO Series

1.6~6.2KW | Dual output

PV1800 ECO is a multi-function inverter/charger, combining functions of inverter, MPPT solar charger and battery charger to offer uninterruptible power support in portable size. PV1800 ECO Series can run without battery. The Maximum PV input voltage can reach 400V/450V/500V, which can help customers make full use of solar energy.(For 1.6~6.2KW)



- Pure sine wave output
- Smart LCD setting (Working modes, Charge Current, Charge Voltage, etc).
- Built-in MPPT solar charge controller
- Wide PV input voltage range
- Can provide the power to the load without battery
- Combining solar system, AC utility, and battery power source to supply continuous power
- Overload, short circuit and Deep discharge protection
- Cold start function
- Support RS485,CAN monitoring function
- Dual outputs for smart load management
- Can communicate with lithium batteries (CAN port)

Back panel description

3.5KW

1. Ground

2. AC Input

3. AC Output1

4. AC Output2

5. Battery Input

6. PV input

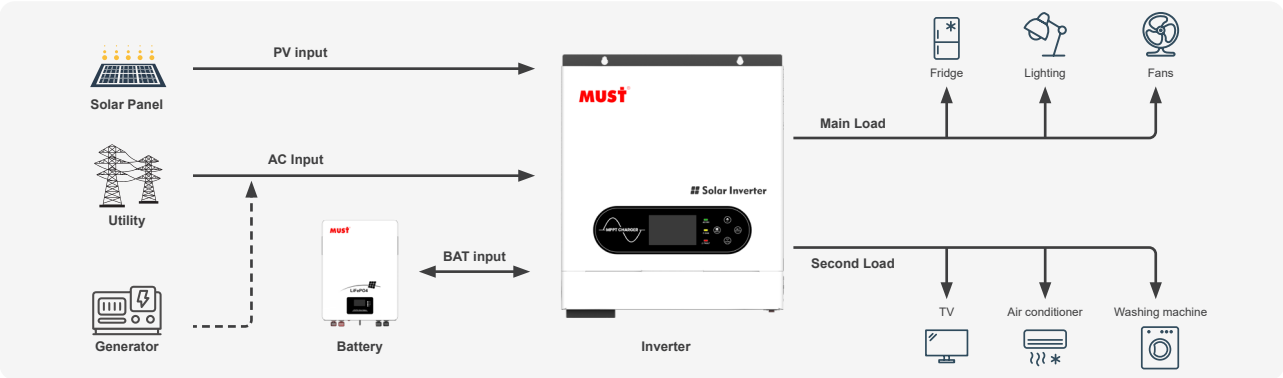
7. ON/OFF Switch

8. RS-485/CAN Communication port

9. Dry Contact

10. WiFi port

Solar system connection



| MODEL                             | PV18-1612<br>ECO                                                | PV18-2524<br>ECO | PV18-3024<br>ECO | PV18-3524<br>ECO | PV18-5548<br>ECO | PV18-6248<br>ECO |
|-----------------------------------|-----------------------------------------------------------------|------------------|------------------|------------------|------------------|------------------|
| Default Battery System Voltage    | 12VDC                                                           | 24VDC            | 24VDC            | 24VDC            | 48VDC            | 48VDC            |
| INVERTER OUTPUT                   |                                                                 |                  |                  |                  |                  |                  |
| Rated Power                       | 2000VA/1600W                                                    | 2500VA/2500W     | 3000VA/3000W     | 3500VA/3500W     | 5500VA/5500W     | 6200VA/6200W     |
| Output Channel                    | Dual                                                            | Dual             | Dual             | Dual             | Dual             | Dual             |
| Surge Power                       | 3200W                                                           | 5000W            | 6000W            | 7000W            | 11000W           | 12400W           |
| Waveform                          | Pure sine wave                                                  |                  |                  |                  |                  |                  |
| AC Voltage Regulation (Batt.Mode) | 230VAC±5%(Setting)                                              |                  |                  |                  |                  |                  |
| Inverter Efficiency(Peak)         | >90%                                                            |                  |                  |                  |                  |                  |
| Transfer Time                     | Typical < 10ms , 20ms max                                       |                  |                  |                  |                  |                  |
| AC INPUT                          |                                                                 |                  |                  |                  |                  |                  |
| Voltage                           | 230VAC                                                          |                  |                  |                  |                  |                  |
| Selectable Voltage Range          | 170~280VAC(UPS) / 90~280VAC(APL) / 184~253VAC(VDE)              |                  |                  |                  |                  |                  |
| Frequency Range                   | 50Hz / 60Hz (Auto sensing)                                      |                  |                  |                  |                  |                  |
| BATTERY                           |                                                                 |                  |                  |                  |                  |                  |
| Normal voltage                    | 12V                                                             | 24VDC            | 24VDC            | 24VDC            | 48VDC            | 48VDC            |
| Floating Charge Voltage           | 13.7VDC                                                         | 27.4VDC          | 27.4VDC          | 27.4VDC          | 54.8VDC          | 54.8VDC          |
| Overcharge Protection             | 15VDC                                                           | 30VDC            | 30VDC            | 30VDC            | 60VDC            | 60VDC            |
| SOLAR CHARGER & AC CHARGER        |                                                                 |                  |                  |                  |                  |                  |
| Maximum PV Input Voltage          | 400VDC                                                          | 400VDC           | 400VDC           | 450VDC           | 450VDC           | 500VDC           |
| Charging Algorithm                | 3-Step (Flooded Battery, AGM / GEL / LEAD Battery), 4-Step (Li) |                  |                  |                  |                  |                  |
| Maximum PV Array Power            | 2000W                                                           | 4000W            | 4000W            | 4000W            | 6000W            | 6200W            |
| PV Array MPPT Voltage Range(Typ.) | 30~320VDC                                                       | 30~320VDC        | 30~320VDC        | 60~360VDC        | 60~360VDC        | 120~450VDC       |
| PV maximum input current          | 16A                                                             | 18A              | 18A              | 18A              | 28A              | 28A              |
| Maximum Solar Charge Current      | 80A                                                             | 100A             | 100A             | 100A             | 100A             | 120A             |
| Maximum AC Charge Current         | 80A                                                             | 60A              | 60A              | 60A              | 100A             | 100A             |
| Maximum Charge Current            | 80A                                                             | 100A             | 100A             | 100A             | 100A             | 120A             |
| MECHANICAL SPECIFICATIONS         |                                                                 |                  |                  |                  |                  |                  |
| Machine Dimension (W*H*D)(mm)     | 290*367*111                                                     | 290*367*111      | 290*367*111      | 318*367*122.5    | 318*454*122.5    | 318*428*140      |
| Package Dimension (W*H*D)(mm)     | 446*394*187                                                     | 446*394*187      | 446*394*187      | 446*410*200      | 544.5*410*210    | 550*400*220      |
| N.W (kg)                          | 6.4                                                             | 6.7              | 6.7              | 7.3              | 9.0              | 10.0             |
| G.W (kg)                          | 7.4                                                             | 7.7              | 7.7              | 8.3              | 10.5             | 11.6             |
| OTHER                             |                                                                 |                  |                  |                  |                  |                  |
| Humidity                          | 5% to 95% Relativ Humidity (Non-condensing)                     |                  |                  |                  |                  |                  |
| Operating Temperature             | 0°C~50°C                                                        |                  |                  |                  |                  |                  |
| Storage Temperature               | -15°C -60°C                                                     |                  |                  |                  |                  |                  |
| Warranty                          | 2years                                                          |                  |                  |                  |                  |                  |
| CERTIFICATION & STANDARDS         |                                                                 |                  |                  |                  |                  |                  |
| CE                                |                                                                 |                  |                  |                  |                  |                  |

\*The technical specifications of this document are subject to change without any notice